

Michigan's Statewide Longitudinal Data System (MSLDS) Overview

Michigan's Center for Educational Performance and Information (CEPI) is building a statewide longitudinal data system (MSLDS) to support Governor Granholm's agenda to double the number of Michigan residents who obtain postsecondary credentials and degrees and to meet several federal mandates. Significant resources have been invested in the collection of student, staff, facility and financial data that describe pre-kindergarten through twelfth grade (PK-12) education systems and participants. CEPI has been tasked with including postsecondary, adult learner and workforce data to the MSLDS to broaden the data connection of Michigan's students. CEPI has aligned data definitions; created and maintained student, staff and course identifiers; and continues to ensure that vertical and horizontal cross-systems linkages are being enabled across statewide data systems. CEPI invests in processes and procedures that ensure the security, privacy, quality, reliability and integrity of the data.

CEPI has a key role in overseeing the development and maintenance of the MSLDS. The goal is to have the MSLDS functional by September 2011. Although an MSLDS is never truly "finished," the project is planned to be developed and implemented in three phases. In all three phases, processes will involve: 1) database development, 2) development of data store and foundation tables, 3) cleaning and transforming the data, 4) loading the cleansed data into an analytical data store, and 5) development of queries and stored procedures to develop data extracts and reports. The general differences between the three phases are among the data extraction processes from the following systems:

Phase 1

- Michigan Student Data System (MSDS)
- Educational Entity Master (EEM)
- Office of Educational Assessment and Accountability (OEAA) Databases

Phase 2

- Docufide Michigan e-Transcripts Initiative Repositories (Postsecondary and high school data)
- National Student Clearinghouse Data (Postsecondary data)
- Registry of Educational Personnel (REP)
- Financial Information Database (FID)

Phase 3

- School Infrastructure Database (SID)
- Michigan Adult Education Reporting System (MAERS)
- Michigan Compliance Information System (MI-CIS)
- Career and Technical Education Information System (CTEIS)
- Michigan Electronic Grant System (MEGS)
- Migrant Education Data System (MEDS)

CEPI has completed a thorough consideration of these systems/applications in partnership with those state agency stakeholders. The agencies involved include the Department of Technology, Management and Budget (DTMB), the Michigan Department of Education (MDE), the Michigan Department of Treasury (MDT) and the Department of Energy, Labor and Economic Growth (DELEG). CEPI created a request for proposal (RFP) seeking a vendor who can create the MSLDS in the timeframe and method proposed by CEPI and key stakeholders. Although much work goes into building a MSLDS, CEPI has identified four core areas requiring resources of staff and collaboration among districts and key state agencies:

Information Access. As its already extensive state (and district) education data archives accumulate and interconnect, Michigan needs to make the information more accessible through a data portal and enhance users' capacity to use it well, while maintaining confidentiality and security. The creation of an education data portal includes: requirements gathering for new reports to be included in the portal; repurposing infrastructure; implementing a robust role-based security model;

designing and providing data access for teachers, researchers and the public; modifying the existing roster system to collect reasons for students not tested; designing and implementing reporting templates on those students; and determining the extraction, transformation and load processes to move the data to the MSLDS.

Instructional Connections. Michigan is funding regional data consortia to collect, analyze and report local assessment and other data. By coordinating with and connecting to the MSLDS, these consortia will provide strong support for continual instructional improvements statewide. Connecting student performance data to teachers will allow districts to include student growth in their educator evaluation systems. Creating the student-teacher link includes gathering necessary teacher/student/course-level data, modifying the existing Michigan Student Data System (MSDS) to collect teacher and course data at the student level, creating data structures in the MSLDS for enhanced reporting requirements, extracting data from the MSDS to load into the MSLDS, designing and implementing analysis and reporting templates for teacher to student connection reports, providing secure access and professional development for teachers, assigning the unique teacher identifier earlier to track the credentialing institution, and building storage and reporting capacity.

Data Systems Linkages. Michigan has begun efforts to interconnect PK-12, postsecondary and workforce data systems, but much technical work remains before the additional data sources can be used effectively to identify leaks in the educational pipeline. Expanding data linkages includes implementing the process for colleges to send student academic records to the e-Transcript vendor, implementing processes for the state to pull those data into the MSLDS, assigning unique identifiers to postsecondary students, pulling workforce data into the MSLDS, and gathering report requirements for the SFSF, postsecondary and workforce data.

Stronger Analytics. Michigan is highly concerned about establishing mechanisms to bring stronger analytics to bear on its data. CEPI proposes a research collaborative to make data available to researchers to evaluate the effectiveness of instruction and other education. At the same time, Michigan is using other federal funds to bolster the growth of regional data archives. Both efforts will engage citizens, researchers and stakeholders in conversations about education reform. Supporting stronger analytics involves identifying a neutral party to design and implement a research collaborative, convening and supporting a research collaborative in identifying reporting and analysis needs, and providing resources to review and process research requests, as coordinated through the research collaborative.

The MSLDS governance structure contains a variety of advisory groups and workgroups:

- **P-20 Advisory Council** – The governor will be issuing an executive order making this official. The group will recommend policy items for review by CEPI and MDE and will help establish model data-sharing agreements, memorandums of understanding and will inform CEPI of policy implications for various MSLDS data items being used for longitudinal analysis. It will also recommend research questions and policy issues to be addressed via the MSLDS.
- **PK-12 Data Work Group** – This group will be focused on implementation challenges and issues that arise in the course of establishing an MSLDS. The focus will be on its area of expertise (PK-12) with effort devoted to identifying and overcoming challenges related to linking data sets to postsecondary and workforce records. This group will analyze issues brought up by the P-20 Advisory Council, recommend strategies for addressing them and implement approaches for accomplishing the work.
- **Adult Learner Data Work Group** – This group will be focused on implementation challenges and issues aligned with adult learners and the workforce as the state works to address issues driven by the P-20 Advisory Council. This group will work on data exchange issues between institutions of higher education, the adult education community and the state.
- **Research Collaborative** – Michigan’s state-level research collaborative will assemble researchers from across the state and the Midwest region to collaborate on and contribute to the development of a research agenda targeting needs recommended by the P-20 Advisory Council. This group will enable the organization of a broad research capacity to address state education policy questions in a more coherent fashion. This state-level research collaborative will oversee several key data tasks: 1) work with the P-20 Advisory Council to set and prioritize a state research agenda, 2) ensure that student, school and system performance are measured meaningfully, 3) build

the technical and human capacity to use the data effectively in local education agencies, by research audiences and centrally, 4) review research proposals requiring state data, regardless of funding source, 5) establish guidelines and standards for proposal submission with data requests, and 6) make appropriate research results available to the public through the state's education data portal.